

Title (en)

SENSOR ELEMENT AND GAS SENSOR

Title (de)

SENSORELEMENT UND GASSENSEOR

Title (fr)

ÉLÉMENT DE CAPTEUR ET CAPTEUR DE GAZ

Publication

EP 3073255 A1 20160928 (EN)

Application

EP 16161440 A 20160321

Priority

- JP 2015067539 A 20150327
- JP 2016049723 A 20160314

Abstract (en)

A sensor element 101 includes an element body 102 having an elongate rectangular parallelepiped shape and including solid electrolyte layers with oxygen ion conductivity, an outer pump electrode 23 disposed on a first surface 102a of the element body 102, and a protective layer 84 covering at least a part of a second surface 102b of the element body on a side opposite to the first surface 102a and including one or more exposed spaces (an lower space 92) to which the second surface 102b is exposed.

IPC 8 full level

G01N 27/407 (2006.01)

CPC (source: EP US)

G01N 27/407 (2013.01 - EP US); **G01N 27/41** (2013.01 - US); **G01N 33/0037** (2013.01 - EP US); **Y02A 50/20** (2017.12 - EP US)

Citation (applicant)

- JP 2011214853 A 20111027 - NGK INSULATORS LTD
- JP 3766572 B2 20060412

Citation (search report)

- [XYI] DE 102011082173 A1 20130307 - BOSCH GMBH ROBERT [DE]
- [A] DE 102012210725 A1 20140102 - BOSCH GMBH ROBERT [DE]
- [XP] US 2015114085 A1 20150430 - IWANO TORU [JP], et al
- [YA] JP 2012168030 A 20120906 - NIPPON SOKEN, et al
- [A] US 2015040642 A1 20150212 - OYA SEIJI [JP]
- [A] EP 2554984 A1 20130206 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3073255 A1 20160928; EP 3073255 B1 20200624; US 10876994 B2 20201229; US 2016282299 A1 20160929

DOCDB simple family (application)

EP 16161440 A 20160321; US 201615074272 A 20160318